

CLAIMS

What is claimed is:

- 5 1. An interface device having a video BIOS component, comprising:
a substrate for implementing a mother board connection and implementing a GPU
(graphics processor unit) connection; and
a video BIOS component mounted on the substrate for providing video BIOS
functions for the computer system.
- 10 2. The interface device of claim 1 further comprising:
a GPU mounted on the substrate with the video BIOS component.
3. The interface device of claim 2 further comprising:
15 a DRAM component mounted on the substrate with the GPU and the video BIOS
component.
4. The interface device of claim 2 further comprising:
a plurality of DRAM components mounted on the substrate, wherein the GPU is
20 mounted in a flip chip configuration.
5. The interface device of claim 2 wherein the video BIOS component
programmed in accordance with a type of the GPU.
- 25 6. The interface device of claim 1 wherein the substrate includes a plurality of
circuits for interfacing the video BIOS component with the GPU connection.

7. A GPU interface device, comprising:

a substrate for coupling a GPU to a PCB (printed circuit board), the substrate having a first interface for a connection to the GPU and a second interface for a connection to the PCB, the first interface having a customizable attachment footprint for implementing a connection to differing GPU types while maintaining the second interface for the connection to the PCB; and

a video BIOS component for providing video BIOS functions, wherein the video BIOS chip is programmed to support a version of the GPU.

10

8. The GPU interface device of claim 7 wherein the customizable attachment footprint of the first interface includes a plurality of ground balls configured to support high-speed signaling of a GPU.

15

9. The GPU interface device of claim 7 wherein the second interface is configured to support at least two DACs for a plurality of displays.

10. The GPU interface device of claim 7 wherein the second interface is configured to support a digital video output for a digital display.

20

11. The GPU interface device of claim 7 wherein the differing GPU types are identical GPU integrated circuits and differing amounts of memory.

12. The GPU interface device of claim 7 wherein the substrate includes a plurality of circuits for coupling the video BIOS component with the first interface for the differing GPU types.

25

13. A computer system having a combined GPU video BIOS package,
comprising:

a motherboard for mounting a plurality of integrated circuit components;

a GPU package adapted to connect to the motherboard;

5 a GPU included in the GPU package for providing graphics processor functions
for the computer system; and

a video BIOS chip included in the GPU package for providing video BIOS
functions for the computer system, wherein the video BIOS chip is programmed to
support a version of the GPU.

10

14. The computer system of claim 13 further comprising:

an interface adapted to couple to the GPU package and implement a connection
between the GPU package and the motherboard.

15

15. The computer system of claim 13 further comprising:

a substrate for mounting the GPU and the video BIOS component.

16. The computer system of claim 15 further comprising:

20 a DRAM component mounted on the substrate with the GPU and the video BIOS
component.

17. The computer system of claim 15 further comprising:

25 a plurality of DRAM components mounted on the substrate, wherein the GPU is
mounted in a flip chip configuration.

25

18. The computer system of claim 13, wherein the video BIOS is programmed for
the GPU when the GPU package is manufactured.